# All-Payer Claims Databases

November 16, 2010 Alan M. Prysunka, Maine Health Data Organization

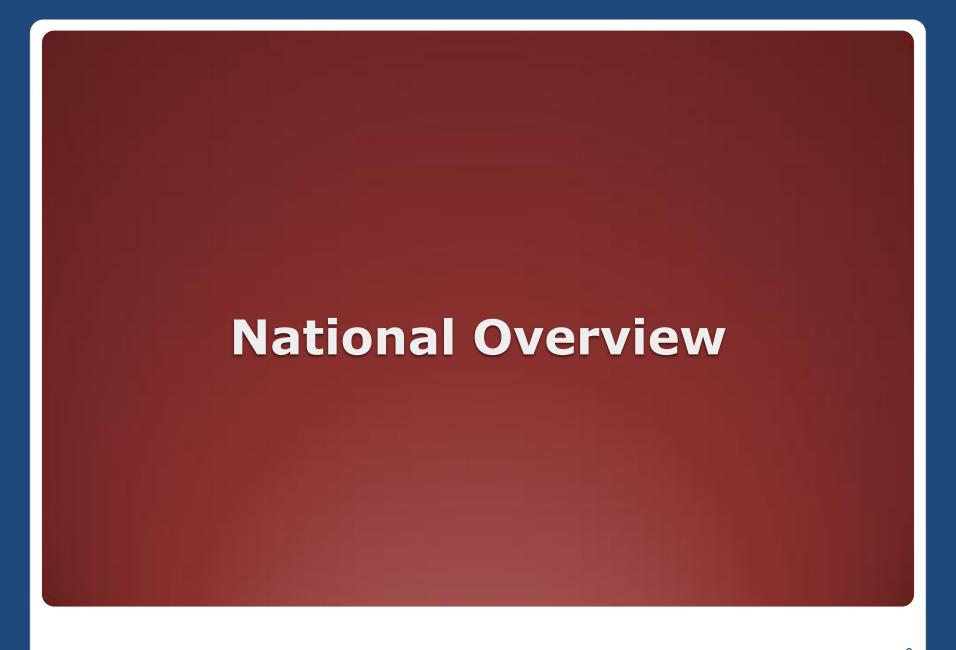






## **Topics**

- National Overview
- Resource Center
- Lessons Learned
- Standardization
- Questions



## **APCDs Are About Transparency**

- Which hospitals have the highest prices?
- In what geographies is public health improving?
- What percentage of my employees have had a mammogram?
- If emergency room usage in Medicaid is higher than the commercial population, what are the drivers?
- What is the average length of time people are using antidepressant medications?
- How far do people travel for services? Which services?
- Hundreds of additional questions have been asked....

## **Definition of APCDs**

- Databases, created by state mandate, that typically include data derived from medical, eligibility, provider, pharmacy, and/or dental files from private and public payers:
  - Insurance carriers (medical, dental, TPAs, PBMs)
  - Public payers (Medicaid, Medicare)

## **All Payer Road Map**

#### Engagement

- •Stakeholder Identification
- Education
- Partnerships
- Advocates



#### Governance

- •Governance Model
- Structure
- Rules for Collection and Release
- •Standards Adoption



#### Sustainability

- •Initial Funding
- •Revenue Model



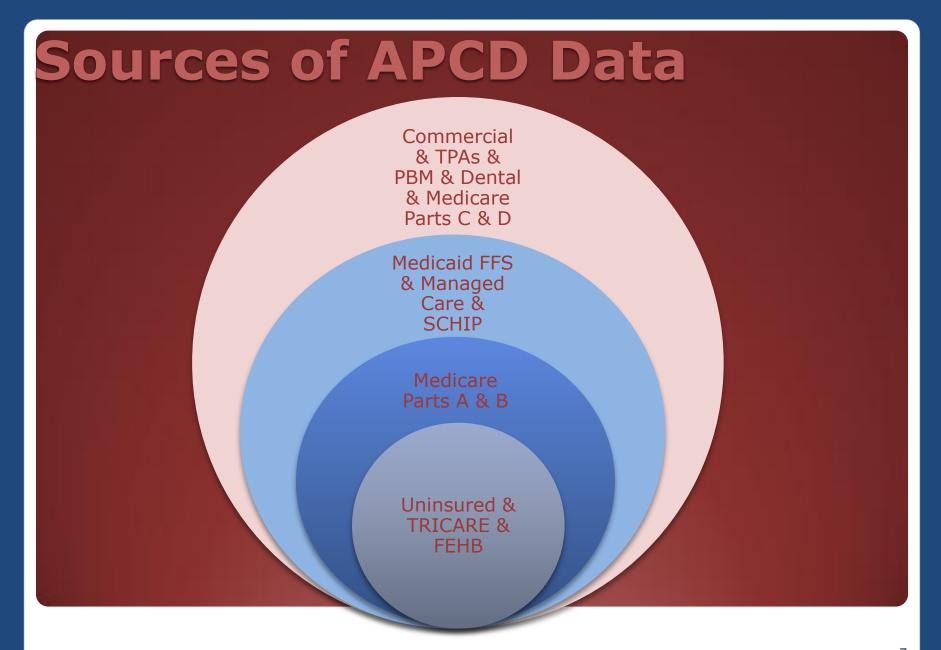
#### Technical Build

- Vendor Decision
- Maintenance
- •Linkage to Other Data Sources



#### Analysis & Application Development

- Reporting
- Applications
- Meta Data



## **Typically Included Information**

- Encrypted social security
- Type of product (HMO, POS, Indemnity, etc.)
- Type of contract (single person, family, etc.)
- Patient demographics(date of birth, gender, residence, relationship to subscriber)
- Diagnosis codes (including Ecodes)
- Procedure codes (ICD, CPT, HCPC, CDT)
- NDC code / generic indicator

- Revenue codes
- Service dates
- Service provider (name, tax
- id, payer id, specialty code,
- city, state, zip code)
- Prescribing physician
- Plan payments
- Member payment
- responsibility (co-pay,
- coinsurance, deductible)
- Date paid
- Type of bill
- Facility type

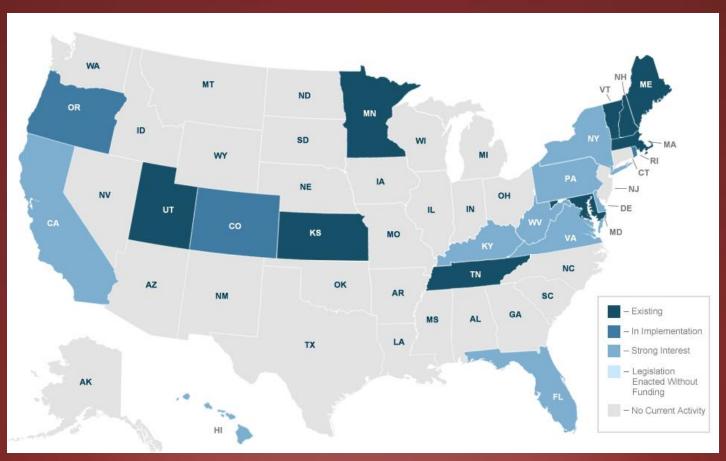
## **Typically Excluded Information**

- Services provided to uninsured (few exceptions)
- Denied claims
- Workers' compensation claims
- Premium information
- Capitation fees
- Administrative fees
- Back end settlement amounts
- Referrals
- Test results from lab work, imaging, etc.
- Provider affiliation with group practice
- Provider networks

## **National Activities**

- Standards Development
- Technical Assistance
- Web Resources
- Publications and Issue Briefs
- Annual Conference
- AHRQ USHIK Database
- Partners: APCD Council, NAHDO, States, Carriers, AHRQ, AHIP, NCPDP, AcademyHealth State
   Coverage Initiatives, Commonwealth Fund, NGA

# Status of State Government Administered All Payer / All Provider Claims Databases





### www.apcdcouncil.org





#### Interactive State Reports Map

Click on a state to find out about the APCD in that state



States: As information about the APCD changes in your state, please contact ashley.peters@unh.edu, so that we can keep the state profiles current.

#### Welcome to the APCD Council!

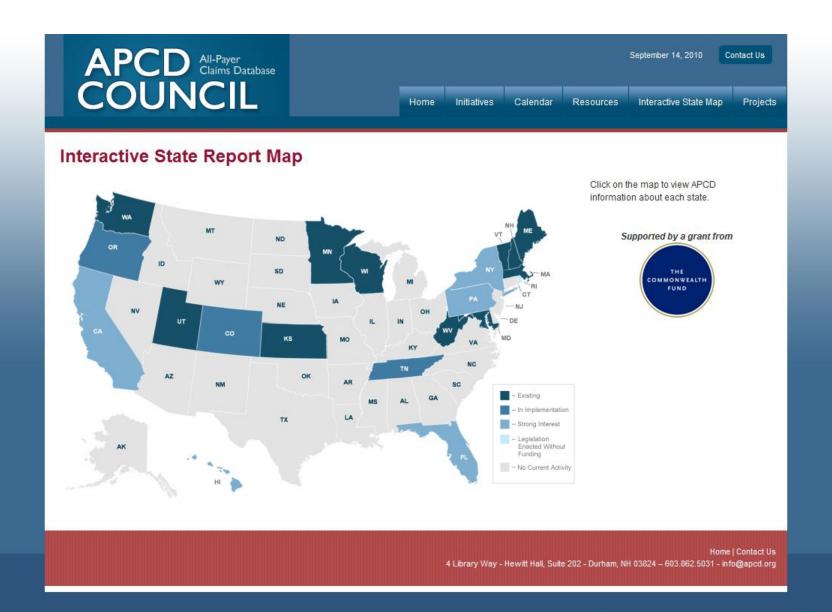
The APCD Council, formerly known as the Regional All Payer Healthcare Information Council (RAPHIC), is a federation of government, private, non-profit, and education organizations focused on improving the development and deployment of state-based all payer claims databases (APCD). The APCD Council is convened and coordinated by the Institute of Health Policy and Practice (IHPP) at the University of New Hampshire (UNH) and the National Association of Health Data Organizations (NAHDO).

RAPHIC was first convened in 2006 by UNH, IHPP staff with the goal of engaging future users of the Maine and New Hampshire APCDs in a discussion about multi-state collaboration. Soon after, states across the country joined the group. Currently, there is participation from nearly a dozen states. NAHDO was established in 1986 to promote the uniformity and availability of health care data for cost quality and access purposes. In 2007, NAHDO forged a collaboration with RAPHIC to expand APCD data initiatives beyond the north east region and to lead fund raising for APCD products and conference support. Together, NAHDO and RAPHIC have been coordinating a multistate effort to support state APCD initiatives and shape state reporting systems to be capable of supporting a broad range of information needs.

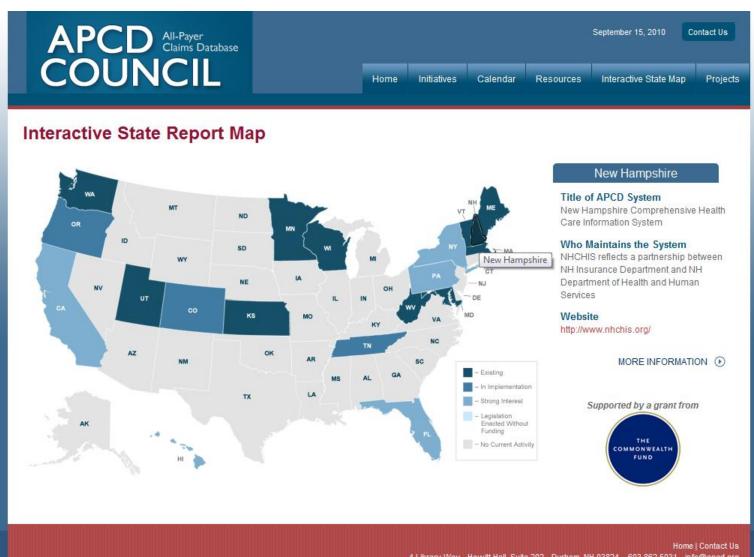
In response to a shift from a regional to nationwide focus, RAPHIC has changed its name to the APCD Council. The APCD Council will continue to work in collaboration with states to promote uniformity and use of APCDs.

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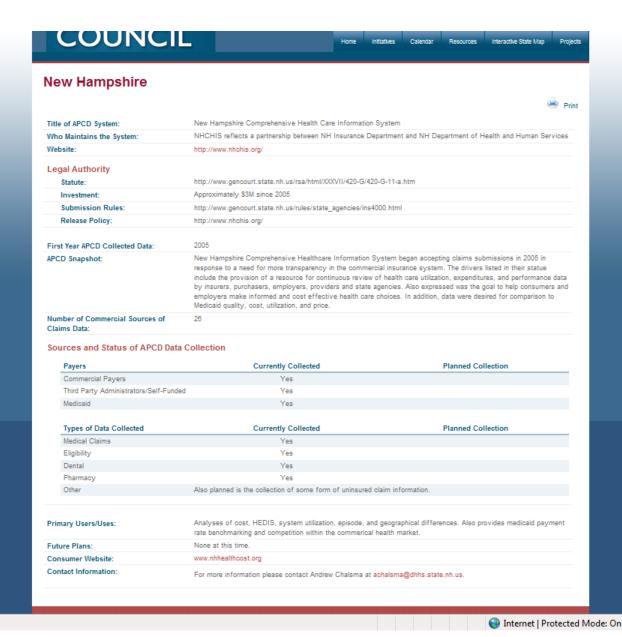


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#### Resources

Building an APCD

Step 1: Getting Started in Your State

Step 2: Legislation for Claims Data Collection

Step 3: Data Collection Rules

Step 4: Data Release Rules

Meetings and Conferences

Newsroom

Policy Briefs and Reports

#### Step 1: Getting Started in Your State

Applications of All-Payer Claims Data

The following resources provide a general overview of how APCDs can be applied:

- "Overview of All-Payer Claims Databases" Presentation, Miller 2010
- · Academy Health All-Payer Claims Databases: An Overview for Policymakers
- · APCD Development Progress per State

**Utilization of All-Payer Claims Data** 

The following sites link to reports or web sites that use claims data:

- VHCURES Reports
  - · 2007- 2008 Vermont Healthcare Utilization Profile Highlights
  - 2007- 2008 Vermont Healthcare Utilization Profile Report
  - 2008 Vermont Expenditure and Utilization Report
- NH CHIS See "Data and Reports" for examples of reports that the New Hampshire Department of Health and Human Services has released based on claims data analysis.
- NH Health Cost This web site uses the New Hampshire claims data to provide information about the price of medical care in
- APD Applications Resource Guide This document summarizes many of the projects that use claims data. It provides the
  project sponsor, a description of the project, and links to project web sites (when available).
- · All-Payer Analysis of Variation in Healthcare in Maine
- . Maine HealthCost This web site uses the Maine claims data to provide information about the price of medical care in Maine
- · West Virginia Compare Cost

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# Experiences and **Lessons Learned**

## Something for Everyone...An Evolution

- Consumers
- Employers
- Health Plans/Payers
- Providers
- Researchers (public policy, academic, etc.)
- State government (policy makers, Medicaid, public health, insurance department, etc.)
- TBD (Federal government, etc.)

## Changing Landscape 2005-10

- Increased Transparency Efforts
- Employer Coalitions
- Payment Reform
  - Patient Centered Medical Home
  - Accountable Care Organizations
- Health Information Exchange (HITECH)
- Health Reform

## **Implementation Starting Point**

- Location of State Authority by Statute
- Funding
- Development of Collection Rules
  - Covered Populations
  - Submission Frequency
  - Thresholds and Exclusions Examples
- Development of Release Rules
- Location of Processing
- Payer Relations
- Multi-Stakeholder Issues and Cooperation

## **APCD Challenges**

- Completeness of Population Captured
- Provider as Unit of Analysis
- Retroactive Payment Adjustments
- To-be-Developed Payment Methodologies
- Consistency Amongst State Databases
- Ability to Link to Other Sources
- State Revenue Models
- Federal Engagement
- Standardization (see next section)

## **Lessons Learned**

- Be Transparent and Document
- Transactional vs. Non-Transactional Uses
- Integration and Linkage Opportunities
- Payer Relationships
- Understanding of Data Across Payers
- Local User Consortiums
- Data Management and Data Analytic Contracting



## **Areas for Standardization**

- Data collection / submission
  - Aligning to HIPAA Standards
  - Efficiencies in metadata, reporting, analysis, and application development
- Data release
  - Political and state-driven

## **Work Plan**

- Comparison of 6 states' APCD data elements for submission is complete; including mapping to HIPAA reference standards for each element
  - Maine
  - New Hampshire
  - Vermont
  - Minnesota
  - Tennessee
  - Massachusetts
- Concurrently, working with AHRQ/USHIK

## **Work Plan**

- Pharmaceutical Claims
  - NCPDP review of APCD pharmaceutical data elements with APCD Council and states
- Eligibility and Medical Claims
  - AHRQ Task Order

## **Work Plan**

- September 2010: Expert consultants reviewing proposed core set of APCD data elements
- October 2010: states will vet proposed temporary core set of elements and method to address state specific elements
- November 2010: APCD Technical Advisory Panel will vet and complete plan for advancing an APCD standard

# Technical Advisory Panel Invitees

- Agency for Healthcare Research and Quality (AHRQ)
- All-Payer Claims Database Council (APCD Council)
- America's Health Insurance Plans (AHIP)
- Individual Payers (e.g., Aetna, Cigna, Harvard Pilgrim Healthcare, Humana, United Health Care)
- Centers for Disease Control and Prevention, National Center for Health Statistics (CDC NCHS)
- Centers for Medicare and Medicaid Services (CMS)
- National Association of Health Data Organizations (NAHDO)
- National Association of Insurance Commissioners (NAIC)
- National Conference of State Legislatures (NCSL)
- National Governors Association (NGA)
- Office of the Assistant for Planning and Evaluation (ASPE)
- State Health Plan Associations various



#### Detailed estimates for Arthroscopic Knee Surgery (outpatient)

Procedure: <u>Arthroscopic Knee Surgery (outpatient)</u> Insurance Plan: Anthem-HMO, Within 50 miles of 03301, Deductible and Coinsurance Amount: \$50.00 / 10%

Lead Provider Name	Estimate of What you Will Pay	Estimate of What Insurance Will Pay	Estimate of Combined Payments	Precision of the Cost Estimate	Typical Patient Complexity	Contact Info
SALEM SURGERY CENTER	\$363	\$2822	\$3185	HIGH	VERY LOW	603.898.3610
CONCORD HOSPITAL	\$383	\$3006	\$3389	MEDIUM	MEDIUM	603.228.7145
DARTMOUTH HITCHCOCK SOUTH	\$398	\$3135	\$3533	LOW	MEDIUM	603.650.5000
LAKES REGION GENERAL HOSPITAL	\$469	\$3776	\$4245	LOW	MEDIUM	603.527.7171
MARY HITCHCOCK MEMORIAL HOSPITAL	\$509	\$4135	\$4644	HIGH	MEDIUM	603.650.5000
SOUTHERN NH MEDICAL CENTER	\$522	\$4254	\$4776	MEDIUM	MEDIUM	603.577.2000
WENTWORTH DOUGLASS HOSPITAL	\$524	\$4266	\$4790	MEDIUM	HIGH	603.742.5252
PORTSMOUTH REGIONAL HOSPITAL - HCA AFFIL	\$548	\$4483	\$5031	MEDIUM	MEDIUM	603.436.5110
PORTSMOUTH AMBULATORY SURGERY CENTER	\$596	\$4918	\$5514	HIGH	MEDIUM	603.433.0941
ST JOSEPH HOSPITAL	\$619	\$5129	\$5748	HIGH	MEDIUM	603.882.3000
FRISBIE MEMORIAL HOSPITAL	\$670	\$5587	\$6257	MEDIUM	MEDIUM	
MONADNOCK COMMUNITY HOSPITAL	\$701	\$5867	\$6568	LOW	HIGH	603.924.7191
EXETER HOSPITAL	\$731	\$6131	\$6862	HIGH	MEDIUM	603.778.7311
FRANKLIN REGIONAL HOSPITAL	\$816	\$6898	\$7714	MEDIUM	MEDIUM	603.527.7171
NEW LONDON HOSPITAL	\$826	\$6988	\$7814	MEDIUM	VERY LOW	603.526.2911

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#### Maine HealthCost

Maine Health Data Organization

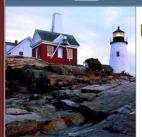
<u>Home</u>

Definitions/Methodology

Statewide Prices

**Procedure Prices** 

Providers/Procedures



#### QUESTIONS OR COMMENTS?

Please contact: Maine Health Data Organization Phone: 207-287-6722

Click here to read about choosing Doctors and Hospitals on the Maine Quality Forum's website

#### PROCEDURE PAYMENTS FOR THE INSURED

**SELECTION SUMMARY** 

Procedure: Colonoscopy (cpt4:45378)

Insurer: Anthem Blue Cross and Blue Shield with Preferred Provider Organization (PPO) <sup>®</sup>

Search Radius: The Entire State

Data used for report:

12/01/2005 through 11/30/2007

If you wish to modify your criteria, click Here.

To PRINT this report, click Here.

Lead Provider	Estimate of Combined Payments	Precision of the Estimate	Patient Complexity	Distance to Provider
Mercy Hospital Phone: (207) 879-3000	\$559	Very Low	High	50.69 miles away from 04333.
Northern Maine Ambulatory Endoscopy Phone: (207) 764-0679	\$761	Very High  → → → →	Very Low	185.10 miles away from 04333.
Portland Endoscopy Center Phone: (207) 773-7964	\$828	Very High  → → → →	Very Low	50.69 miles away from 04333,
Maine Medical Center Phone: (207) 662-0111	\$833	Very Low —	Medium	51.61 miles away from 04333.
Central				18.57
			Internet	€ 100%

#### Maine HealthCost

<u>Home</u> <u>Definitions/Methodology</u>

Statewide Prices

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#### STATEWIDE PROCEDURE PAYMENTS

**Description:** The chart below contains statewide pricing information across all insurance carriers and all medical providers. The chart provides average total charge and payment information, and the individual professional and facility components.

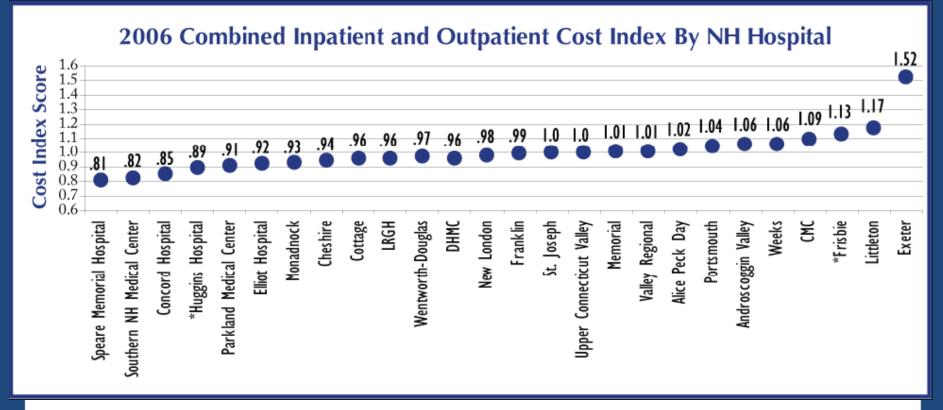
Data used for report: 12/01/2005 through 12/27/2007

Procedure Description	CPT4 Procedure Code	Average Professional Charges	Average Professional Payments	Average Facility Charges	Average Facility Payments	Average Total Charges	Average Total Payments
Arthroscopic Knee Surgery (Outpatient) View Histogram	29881	\$2,998	\$1,493	\$4,221	\$3,698	\$7,219	\$5,191
Biopsy - Breast (Auto Vacuum) <u>View Histogram</u>	19103	\$1,475	\$671	\$2,502	\$2,190	\$3,977	\$2,861
Bronchoscopy <u>View Histogram</u>	31622	\$4,338	\$2,203	\$7,304	\$6,559	\$11,643	\$8,762
Carpal Tunnel Release <u>View Histogram</u>	64721	\$1,729	\$898	\$2,341	\$2,034	\$4,070	\$2,932
Colonoscopy <u>View Histogram</u>	45378	\$751	\$349	\$1,223	\$1,054	\$1,974	\$1,403
Colposcopy With Biopsy View Histogram	57454	\$618	\$355	\$271	\$258	\$889	\$613
CT - Abdomen <u>View Histogram</u>	74160	\$288	\$101	\$1,164	\$951	\$1,452	\$1,053
CT - Chest <u>View Histogram</u>	71260	\$289	\$93	\$1,140	\$968	\$1,429	\$1,061
CT - Head (Without Contrast Material) View Histogram	70450	\$178	\$66	\$797	\$652	\$974	\$718
CT - Pelvis <u>View Histogram</u>	72193	\$251	\$90	\$1,042	\$852	\$1,293	\$942
Gallbladder Removal <u>View Histogram</u>	47562	\$3,442	\$1,907	\$7,573	\$6,643	\$11,016	\$8,551
Hernia Repair (Outpatient) <u>View Histogram</u>	49505	\$2,117	\$1,323	\$4,998	\$4,358	\$7,115	\$5,681
Kidney Stone Removal <u>View Histogram</u>	50590	\$3,053	\$1,466	\$6,566	\$5,578	\$9,619	\$7,044
Mammogram (Screening) <u>View Histogram</u>	76092, 77057, G0202	\$81	\$50	\$140	\$127	\$221	\$177
MRI - Back <u>View Histogram</u>	72148	\$318	\$117	\$1,288	\$1,048	\$1,606	\$1,166
MRI - Knee <u>View Histogram</u>	73721	\$253	\$109	\$1,162	\$973	\$1,416	\$1,083
TIPLE DESCRIPTION OF THE PROPERTY OF THE PROPE	70105	1050	L	£4 070	F1 010	A	A

Source: ME Health Data Organization



# NH Hospital Acute Care Pricing Comparison





Source: http://hcqcc.hcf.state.ma.us/Default.aspx

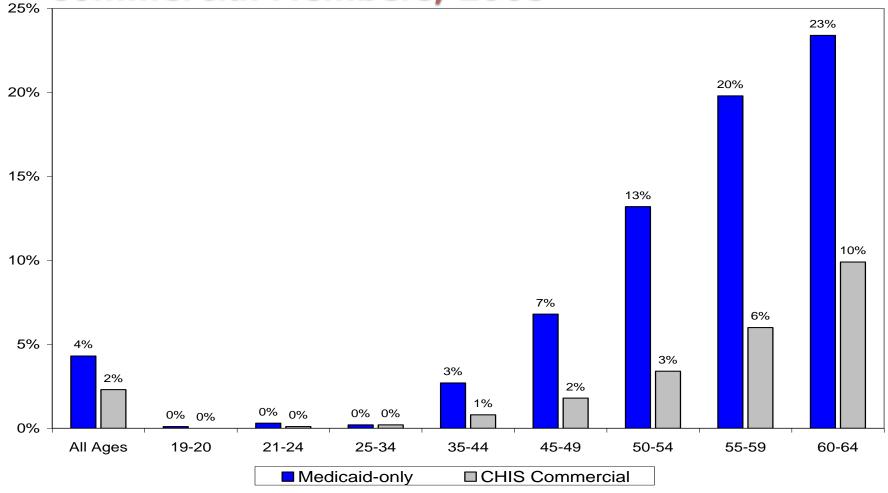
## **Payment Rate Benchmarking**

**Average Payment Including Patient Share, 2006** 

Procedure Code	Health Plan 1	Health Plan 2	Health Plan 3	<b>NH Medicaid</b>
99203 Office/Outpatient Visit New				_
Patient, 30min	\$124	\$115	\$130	\$42
99212 Office/Outpatient Visit				
Established Patient, 10min	\$51	\$48	\$52	\$30
99391 Preventive Medicine Visit				
Established Patient Age <1	\$111	\$102	\$107	\$61
90806 Individual psychotherapy in				
office/outpatient, 45-50min	\$72	\$71	\$71	\$61

SOURCE: NH DHHS

# Prevalence of Adult Coronary Artery Disease by Age, NH Medicaid (non-Dual) and NH CHIS Commercial Members, 2005



37

**SOURCE: NH DHHS** 

## Prevalence of Asthma by Age, NH Medicaid (non-Dual) and NH Commercial Members, 2005

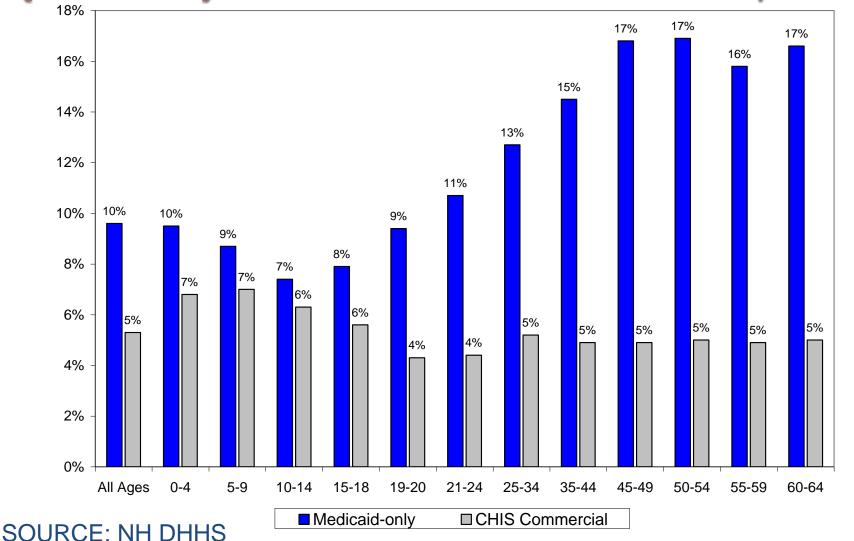
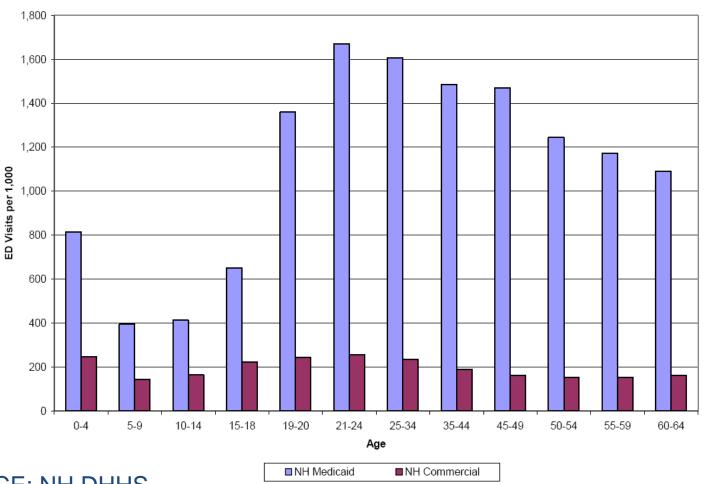
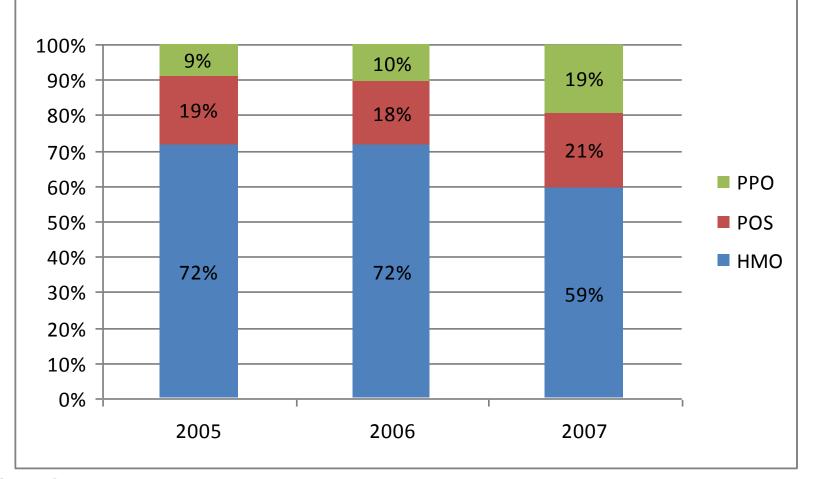


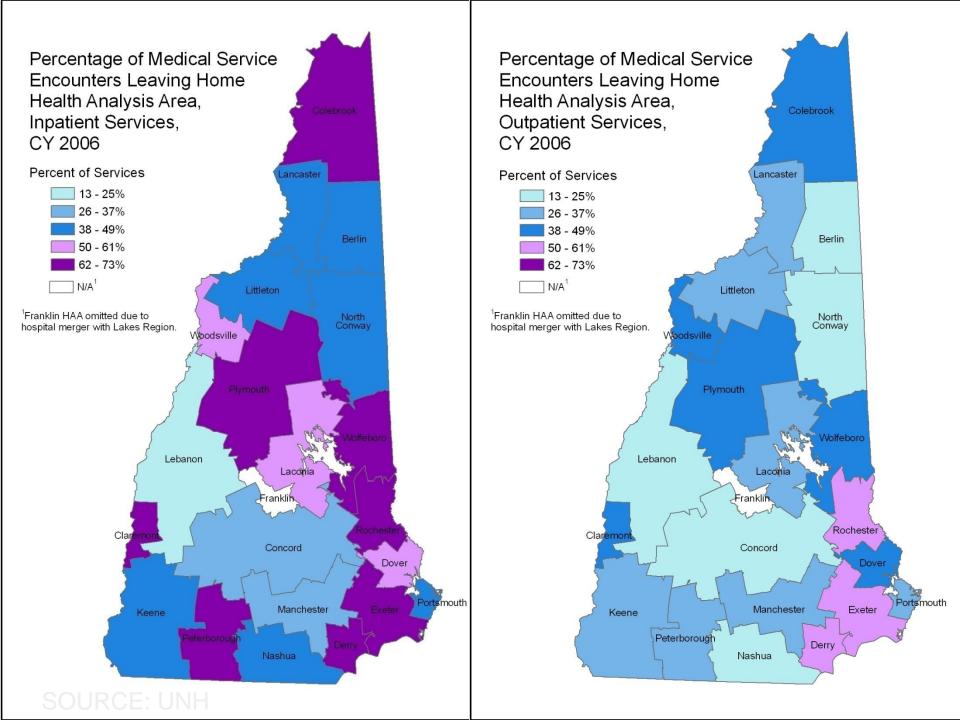
Figure 2. Emergency Department Visit Rates by Age: Medicaid Compared to NH Commercial Members, 2005 Note: age 65 and older not shown, no comparative commercial population



## Change in Distribution of Costs by Insurance Type: Concord



**SOURCE: UNH** 



## **Summary Metrics**

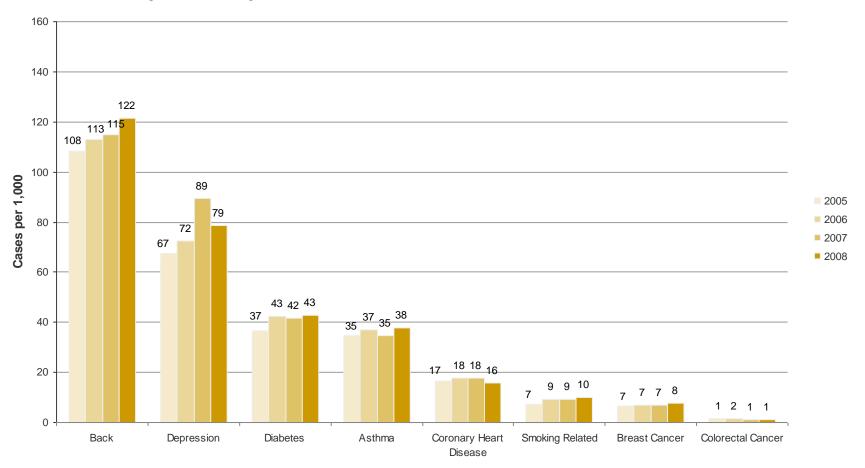
#### **COMPANY ABC and NH Benchmark**

DEMOGRAPHICS	2005	2006	2007	2008	NH BENCHMARK 2008
Average Members	8,736	8680	8647	8786	114,457
Average Age (Yrs)	36.3	36.7	37.6	37.7	39.2
Percent Female (%)	53.4%	53.2%	52.8%	52.7%	53.0%
MEDICAL CLAIM PAYMENTS	2005	2006	2007	2008	NH BENCHMARK 2008
Total Plan Payments (Millions)	\$25.8	\$30.4	\$29.9	\$33.7	\$481.2
Plan Paid PMPM	\$246	\$291	\$288	\$320	\$350
Plan PMPM Trend from Previous Year	NA	19%	-1%	11%	10%
Member Paid PMPM	\$9	\$9	\$8	\$9	\$8
PHARMACY PAYMENTS	2005	2006	2007	2008	NH BENCHMARK 2008
Total Pharmacy Payments (Millions)	\$5.1	\$5.9	\$6.6	\$7.3	NA
Plan Paid PMPM	\$49	\$57	\$63	\$69	NA
Plan PMPM Trend from Previous Year	NA	17%	12%	8%	NA
Member Paid PMPM	\$13	\$14	\$14	\$13	NA

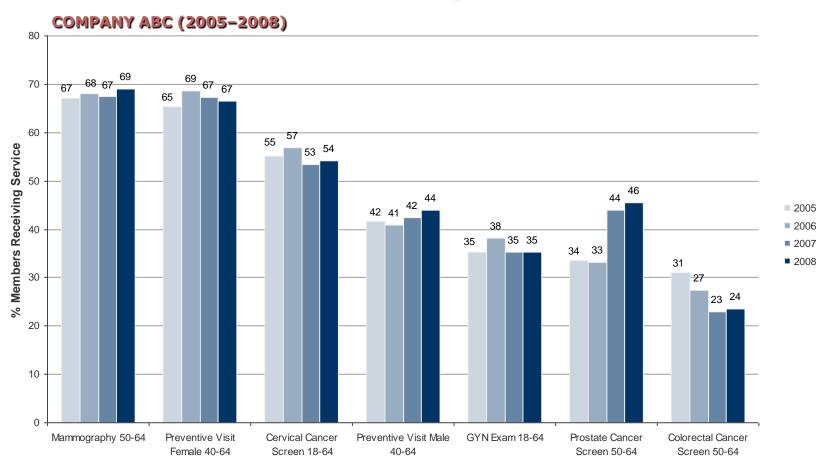
Pharmacy data for some New Hampshire employers currently is under review.

#### **Prevalence of Selected Conditions**

**COMPANY ABC (2005-2008)** 

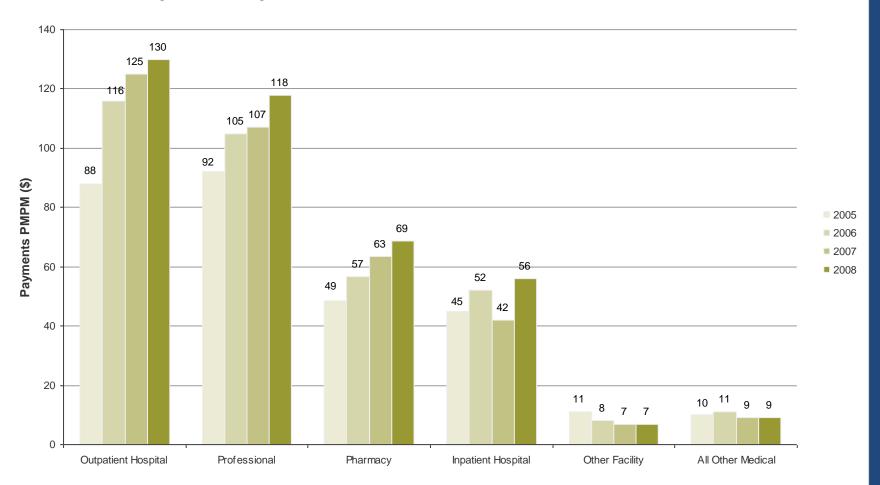


#### **Percent Members Receiving Preventive Services**



#### **Healthcare Plan Payments PMPM by Category**

**COMPANY ABC (2005-2008)** 



## ETGs for Joint Degeneration—Spine Maine Commercial Claims (2006–2007); Full Episodes Outliers Removed

**Preference Sensitive Care** 

JOINT DEGENERATION— SPINE	WITH SURGERY	WITHOUT SURGERY
ETG-Subclass	721-08	722-08
Number of Episodes	802	15,830
% with MRI	84%	26%
% with CT-Scan	12%	2%
% with Standard Musculoskeletal Imaging	82%	36%
% with Chiropractor	20%	50%
% with Osteopathic Manipulation	12%	10%
% with Physical Medicine or Rehab	61%	54%
Avg. Payment per Episode	\$18,088*	\$1,605

<sup>\*</sup> The average payment for 272 episodes with spinal fusion was \$28,290 compared with \$12,853 for 530 episodes with other types of spinal surgery such as laminectomy or diskectomy.

#### **ETGs for Benign Conditions of the Uterus**

Maine Commercial Claims (2006–2007); Full Episodes Outliers Removed Preference Sensitive Care

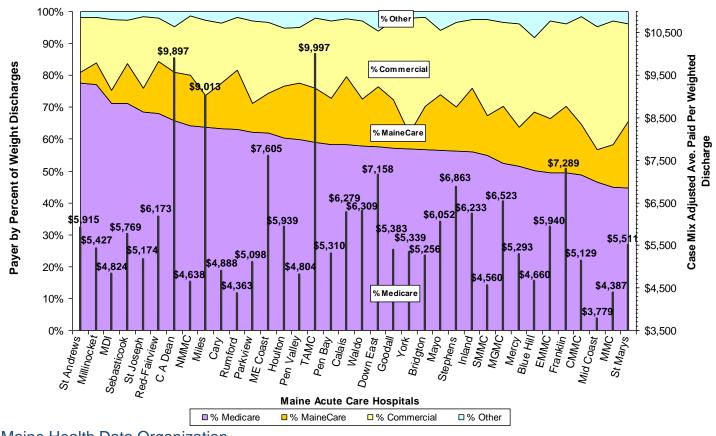
BENIGN CONDITIONS OF THE UTERUS	HYSTERECTOMY	OTHER SURGICAL PROCEDURES	WITHOUT SURGERY
ETG-Subclass	646	646	647
Number of Episodes	938	2,183	7,369
% with CT-Scan	11%	15%	9%
% with Ultrasound	57%	67%	45%
% with Hysteroscopy	7%	48%	9%
% with Colposcopy	1%	2%	17%
% with Endometrial biopsy	20%	13%	9%
Average Payment per Episode	\$11,074	\$7,994	\$1,273

The average episode payment for members with abdominal hysterectomy was \$11,221, and the average payment for members with vaginal hysterectomy was \$10,990. Of members with a hysterectomy, 66% had abdominal and 34% had vaginal hysterectomy. Other surgical procedures included hysteroscopy ablation, laparoscopic removal of lesions, myomectomy, and removal of ovarian cysts.

SOURCE: ONPOINT HEALTH D ATA

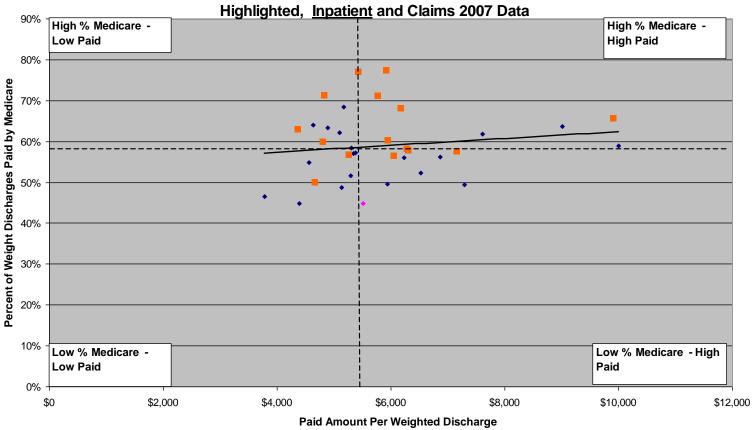
#### Medicare Inpatient

Payer Distribution by Weighted Discharges (from <u>Inpatient</u> Data) and Case Mix Adjusted Average Commercial Paid Amount per Weighted Discharge (from Commercial <u>Inpatient</u> Data and Commercial Claims Data) 2007 - Sorted by <u>Medicare</u>



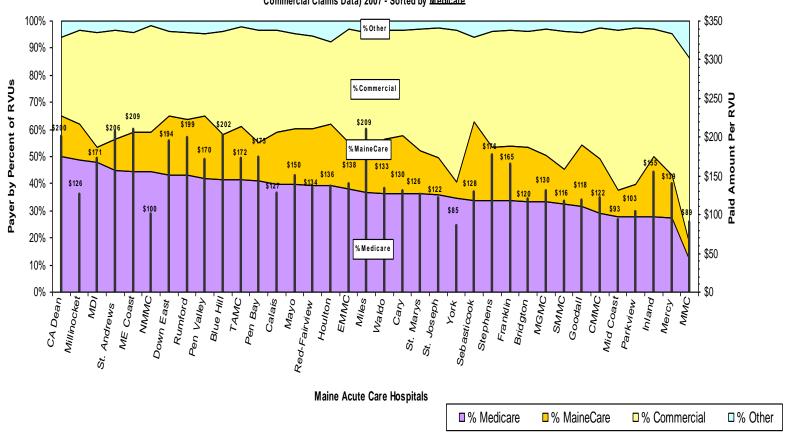
#### Medicare inpatient

Correlation Between Percent <u>Medicare</u> as Payer and Case Mix Adjusted Average Commercial Paid Amount per Weighted Discharge, Critical Access Hospitals



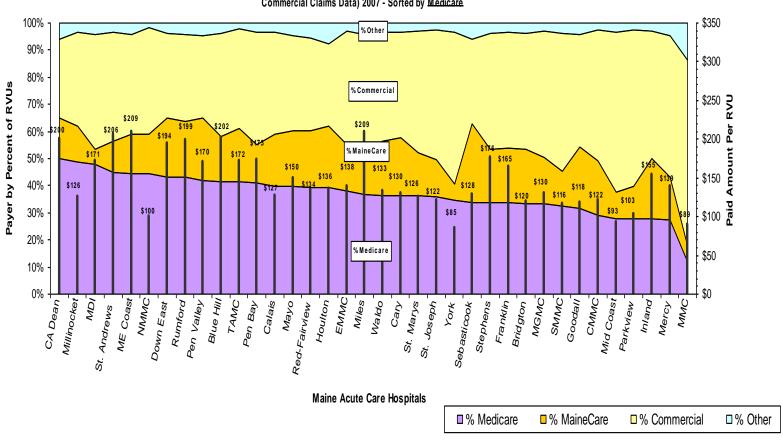
#### **Medicare Outpatient**

Payer Distribution by Relative Value Units (from <u>Outpatient Data</u>) and Average Commercial Paid Amount per Relative Value Unit (from Commercial <u>Outpatient Data</u> and Commercial Claims Data) 2007 - Sorted by <u>Medicare</u>



#### **Medicare Outpatient**

Payer Distribution by Relative Value Units (from <u>Outpatient Data</u>) and Average Commercial Paid Amount per Relative Value Unit (from Commercial <u>Outpatient Data</u> and Commercial Claims Data) 2007 - Sorted by <u>Medicare</u>



# Total IP Adverse Drug Events Discharge, Rate, Total Paid, and Average Paid, 2006-2007 for Maine and New Hampshire

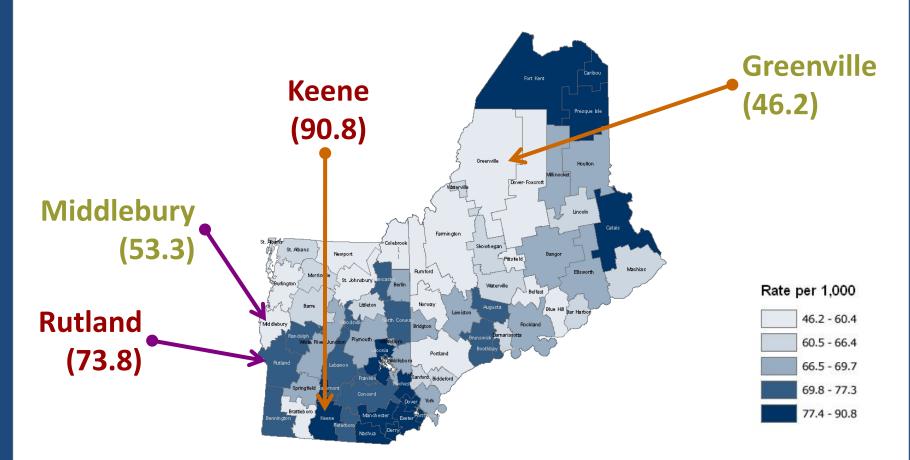
		Rate / 1,000		
Maine	<b>IP Discharges</b>	Discharges	<b>Total Paid</b>	Average Paid
2006	747	26.7	\$ 11,864,264	\$ 15,883
2007	770	34.5	\$ 13,705,995	\$ 17,800
Total	1,517	30.1	\$ 25,570,259	\$ 16,856
% Increase	3%	29%	16%	12%

New		Rate / 1,000		
Hampshire	<b>IP Discharges</b>	Discharges	<b>Total Paid</b>	Average Paid
2006	459	22.3	\$ 5,712,414	\$ 12,445
2007	504	25.1	\$ 6,719,104	\$ 13,332
Total	963	23.7	\$ 12,431,518	\$ 12,909
% Increase	10%	12%	18%	7%

**SOURCE: UNH & HEALTHINFONET** 

#### **Tri-State Variation in Health Services**

Advanced Imaging - MRIs



Source: State of Vermont

#### **Contact Information**

Alan Prysunka alan.m.prysunka@maine.gov 207.287.6723

Patrick Miller (APCD Council) patrick.miller@unh.edu 603.536.4265

Denise Love (NAHDO) dlove@nahdo.org 801.532.2262

www.APCDCouncil.org

for more resources in assisting states to move forward